



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/542,674 04/01/00 ROUSE

G

GRAHAM M ROUSE JR
430 QUEEN STREET
COLUMBIA SC 29205

QM12/0802

EXAMINER

FRANCIS, F

ART UNIT

PAPER NUMBER

3712

DATE MAILED:

08/02/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/542,674

Applicant(s)

ROUSE, GRAHAM M.

Examiner

Faye Francis

Art Unit

3712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 3-10 and 12-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2000 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

DETAILED ACTION

1. Claims 3-10 and 12-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 6.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitations in subsection 13, 15 and 18 of claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Objections

2. Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. In this case, claim 2 does not appear to further structurally limit the balloon display recited in the claim from which it depends.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-2 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

The claims are replete with indefinite language that is too numerous to point out in every instance. The examples set forth below are intended to assist the applicant in making corrections wherever necessary, but not specifically pointed to.

In claim 1 the claim language is confusing since it is not clear whether "at least two apertures " in line 2 is the same apertures as in line 1 or is an additional one.

Claim 1 line 8 "the aperture" is not proper since at least two apertures previously have been introduced.

With respect to claim 1 line 11: the scope of the claim is unclear because of the improper use of the Markush group, reciting members as being "selected from the group consisting of A, B and C" See EX parte Markush, 1925 C.D. 126 (Comm'r Pat. 1925).

Claim 1 is indefinite since it is not clear how the word "indirectly" in line 15, is intended to further limit the device.

With respect to claim 1: the word " otherwise " in line 13 renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "wrapped", "tied", "entangled; otherwise."), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). This terminology is repeated throughout the claims.

With respect to claim 1: the phrase "it's position" in subsection 7 is improper. This terminology is repeated throughout the claims.

With respect to claim 1: the use of phrase "is/are" in subsection 9 is improper and indefinite. This terminology is repeated throughout the claims.

Claim 2 is drafted in such a way that they appear to be entirely functional. The claim is vague and indefinite because, the additional structure sought to be encompassed in the claim can not be determined.

Claim 11 recites the limitation "said framing material" in line 2. There is insufficient antecedent basis for this limitation in the claim. Accordingly the applicant is requested to review all of the claims for the purpose of making corrections wherever appropriate but not specifically pointed to, in order to provide appropriate antecedents and to ensure consistency in the numbers of specific elements recited in the claims. Additionally the claim is indefinite since all that the applicant considers to be encompassed by the phrase "framing material" can not be determined.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Skistimas.

Skistimas discloses in Figs 1-9, a balloon display including at least one framework 11, at least two apertures [grid opening 12], at least one inflatable chamber [balloons 13,14 and 15] being at least partially inflated and circumscribed by a portion of the framework defining the apertures [Fig 1], at least one inflatable chamber is held in the aperture of the framework is connected to the framework.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faye Francis whose telephone number is (703) 306-5941. The examiner can normally be reached on 6:30 AM - 3:00 PM Monday-Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacob Ackun can be reached on (703) 308-3867. The fax phone numbers

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for the organization where this application or proceeding is assigned are (703) 305-3579 for regular communications and (703) 305-3579 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

FF
July 27, 2001


John A. Ricci
Primary Examiner

An examination of this application reveals that applicant is acting *pro se*, that is, not using an attorney or agent in the prosecution of this application. Since a patent is a legal document, applicant should consider using the services of a registered patent attorney or agent; lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed.

The following pages contain information about the patent process and Patent Office that applicant may find helpful.

* * * * *

When one believes he (or she) has invented a useful product, or method useful in industry, the inventor may apply for a patent. The patent gives the inventor the exclusive right, for 20 years from the filing date, to make, import, and sell his invention in the United States. The patent rights may be sold or leased to others. There are two types of patents: a *utility* patent is for inventions which consist of new combinations of parts or structures which function in a way not previously known, to define a new and useful product. A *design* patent is for a new ornamentation or shape of an existing product, without regard to its mechanical functioning, which may make the existing product more convenient to use, or provide a more pleasing appearance to encourage consumers to buy it. Most patents issued are utility patents.

The application for a utility patent includes a number of formal requirements, mainly (a) a written description and

drawings, termed the *specification*, to describe the invention (design patents require only drawings, with no written description necessary), (b) a signed declaration that the inventor believes that the invention has not been made by anyone else before, and (c) an application fee, usually \$710 for big companies, and \$355 for small businesses and independent inventors (additional fees apply for excess claims and other services).

The *specification* is a report, typically about 5-30 typewritten pages with drawings if appropriate, explaining the problem the inventor is trying to solve, prior inventions that are similar to the new invention, how the new invention is an advancement over prior technology, and showing the invention and its manufacture and assembly in sufficient clarity and detail that would allow an engineer or manufacturer of that class of products to build and use the invention without undue experimentation or further inquiry. If the patent is granted, the specification is published and makes up most of the text of the patent.

At the end of the specification are *claims* which set forth exactly what features the inventor considers necessary to define a complete operable product, and to distinguish his invention from the prior products. If granted, the inventor has the right to exclude others from making products which include all the features named in the claims; if others *infringe* on the claims, the inventor has legal remedy. However, others may make products *similar* to the invention, or even products described in the specification text as "new" or "inventive", as long as their competing product omits one or more requirements of the *claims*.

When the inventor has prepared an application which includes the necessary formal requirements and sends it to the Patent Office, the Office is required to (a) issue the patent, or (b) explain why the claimed invention is not patentable in accordance with the patent laws. The application is channeled through various offices as this determination is being made.

Initially, the papers are accepted in the mail room and assigned a *filing date*. The application then goes through various data entry and classification stages, and clerks assure that all necessary papers are present. If some requirement is missing, the applicant will be notified to send the additional information. If the application is complete, it is then delivered to an Examiner.

The Examiner staff (for utility patents) consists of about 4,000 Examiners. Each has at least a 4 year engineering degree, and some have advanced degrees and legal training. The Examiners are divided into three main divisions: those who review mainly electrical and electronic inventions, those who review chemical inventions, and those who review mainly mechanical inventions. Within each division, the Examiners are divided into teams of about 10 Examiners, or *Art Units*, which review specific kinds of inventions, for example automotive, airplanes, air conditioning, construction, etc.

When the complete application is delivered to the appropriate Art Unit it is assigned to an Examiner familiar with the type of invention disclosed. The Examiner then reads through the specification and claims. To determine whether the application should be issued as a patent, or if

the applicant should be sent a rejection notice, the Examiner mainly asks three questions:

(1) Is the invention disclosed in sufficient detail and clarity to enable one to build an operable and useful product, or is difficult for one to understand how to make the product and use it?

(2) Has another inventor already made, or *anticipated*, the product (as defined in the claims)?

(3) If another has not made the invention *exactly* as defined in the claims, is the invention so similar to the prior technology (or "prior art") that an ordinary engineer or manufacturer would have found it *obvious* to modify the prior technology to arrive at the claimed invention?

A body of laws and court decisions has been developed over the years to define the amount of disclosure necessary, and to determine when prior technology anticipates or renders inventions obvious.

If the invention is clearly disclosed, the Examiner will then need to do research to see if anyone has disclosed the claimed invention in the past. It is not necessary that the invention has been *patented* by anyone else, but only that it is disclosed or on display or for sale or in use somewhere. Most of the research for mechanical inventions involves looking through old patents. Examiners may also consider information in sources such as textbooks, newspapers, advertisements, magazines, and even cite common knowledge or experience. As the Examiner does research, he (or she) will look for inventions similar to applicant's, and additionally look for references which may suggest obvious modifications to prior technology which would result in applicant's

invention.

We have about 6,000,000 U.S. Patents on file, as well as millions of foreign patents and other literature. To facilitate research, the information is classified and organized according to technology, much as the books in a library are organized. The information is classified into about 400 broad classes, which define the general technology area, with each class containing typically 50-500 subclasses which define specific technical features or characteristics of the inventions. Each subclass typically contains 50-500 patents and other literature. The patents and literature are kept in file drawers for manual searching; the U.S. patents are also available by computer for online searching. There are also online search capabilities based on keywords; these are used mostly for chemical and electronic invention research.

After the Examiner has read applicant's application, the Examiner will determine which classes and subclasses would be most likely to contain inventions similar to that which applicant is claiming, and will look through those, and will remove relevant documents as he searches. At the conclusion of the research, he will then review the invention as defined in the claims, and compare it with the information he found. He will then write a letter to the applicant either granting the patent and explaining why the applicant's invention is patentable over the prior technology, or denying the patent and explaining how the information found anticipates or renders obvious the claims. Then the applicant can either (1) agree that the invention is not patentable and *abandon* the application, (2) argue

that the Examiner has made an error and that the cited information does not anticipate or render obvious the invention, or (3) add additional features to the claims to avoid the prior technology. If the applicant is not satisfied with the Examiner's opinion, the applicant may appeal to a special three-examiner Appeals Board, and the Federal courts.

Keep in mind though that the grant of a patent is not a statement by the government that applicant's invention is a "good" idea, or will be desired by consumers; the grant of a patent only indicates that applicant has disclosed and claimed something of some minimal utility which is not shown or rendered obvious by prior technology. Marketing this idea and making money is applicant's responsibility. Some inventions end up in widespread use and make millions of dollars, and others don't even recover the cost of obtaining the patent.

* * * * *

When writing a claim, the inventor needs to ask whether his invention is either anticipated by any one document, or rendered obvious by one or more documents. However, the answer to this question depends on the amount of detail he is willing to put in the claims: A very *broad* claim, which includes little detail, will give the invention greater protection and it will be harder for a competitor to design a product which avoids infringing the claims; however, it is more likely that such claim will be rejected over the prior

references. On the other hand, with a *narrow* claim, which includes much detail, it is easier to define over the prior references; however, a competitor may be able to design a similar product by just avoiding one little detail. So what the inventor needs to ask is: "Is it possible to write a claim which includes enough detail to overcome the prior references, but not so much that a competitor will be able to make a product very similar to mine by changing one little feature?" If the answer to this is No, the inventor shouldn't apply for a patent. If the answer is Yes, then the inventor needs to ask the next question: "Is my invention really an advance in the technology that will be valued by consumers, or are people perfectly happy with existing technology and probably won't be willing to try my product?". If the inventor feels that a sufficiently broad claim can be written that defines a desirable product, then it may be worth applying for a patent.

For example, assume that an automobile is known in the prior art, but an automobile with an AM-FM radio is a novel patentable invention.

An example of a claim which is too broad would be: "An automobile with an electrically-operated accessory". This claim would be rejected under 35 USC 102 because it is known that automobiles conventionally include electrical accessories such as lights and horn; this does not distinctly claim the novel radio idea.

An example of a claim which is too narrow would be: "An automobile with an AM-FM radio and a 6-cylinder engine". In this case applicant would indeed receive a valid patent and would be able to exclude others from selling automobiles

with an AM-FM radio and 6-cylinder engine. However, it would be easy for a competing manufacturer to design around this claim by selling automobiles with an AM-FM radio and an 8-cylinder engine. Their competing 8-cylinder automobile would still embody applicant's novel idea and would likely cut into applicant's sales.

The "perfect" claim would be: "An automobile with an AM-FM radio." In this case, a competing manufacturer's product would have to exclude the novel AM-FM radio, so would not likely cut into applicant's business.

However, the grant of this "perfect" claim still does not guarantee that applicant's product will sell well. If consumers are perfectly happy with the prior technology and perceive no benefit from applicant's improvement, they may not be willing to pay more for applicant's product. A patent, to be successful, must often be combined with a marketing and advertising campaign to make people aware of applicant's new product and demonstrate why the new product is better than old products and why consumers should choose the new product. Although applicant may see his idea as a significant improvement, there is no guarantee that consumers will see it this way.

Also keep in mind that if applicant's invention is for an improvement on an existing product, and there is a currently valid patent on that product, it may not be possible for applicant to manufacture his new product without infringing the existing patent.

For example, if Ford owns a valid patent for "An automobile with an engine and four tires", and applicant has invented a novel "Automobile with an engine, four tires, and

AM-FM radio", Applicant may very well obtain a valid patent on such automobile with radio. However, if applicant tries to sell such an automobile with radio, Ford may demand payment of royalties, or even shut down applicant's business altogether, because this will infringe their basic automobile patent; applicant's patent will not have full value until Ford's patent expires, which could be years from now.

* * * * *

Claims are written as a single sentence which is the object of a sentence starting with "I (or We) claim". To see how this works look at the following three claims:

I claim:

1. A vehicle having a front and a rear with a seat facing the front and four wheels including a front pair of wheels, and a back pair of wheels.

2. A vehicle having a front and a rear with a seat facing the front and four wheels including a front pair of wheels, and a back pair of wheels, and further including an engine supported primarily above said rear wheels.

3. A vehicle having a front and a rear with a seat facing the front and four wheels including a front pair of wheels and a back pair of wheels, said vehicle further including an engine supported primarily by said rear wheels, and a power train extending from said engine to said front wheels whereby said rearwardly supported engine can provide motive power to said front wheels.

These are *independent* claims and are of progressively narrower scope. An *independent* claim sets forth a complete invention without referring to any other claim. Every patent application must include at least one independent claim.

It is often desired to further define an invention set forth in a previous claim. This may be done with *dependent* claims. A dependent claim refers back to another claim, either independent or dependent, and includes all features of this previous claim, and adds additional features. For example, Claims 2 and 3 could have been written in dependent form as follows:

2. A vehicle as in claim 1 and further including an engine supported primarily above said rear wheels.

3. A vehicle as in claim 2 and further including a power train extending from said engine to said front wheels whereby said rearwardly supported engine can provide motive power to said front wheels.

Claim 2 covers all the features of the vehicle of Claim 1, *plus* the rear engine. Claim 3 covers all the features of the vehicle of claim 1, *plus* the rear engine of claim 2, *plus* the power train.

Claim 1 if granted would permit the patent holder to exclude others in the United States from making cars, trucks, and even wagons having a seat and four wheels.

Both claims 1 and 2 are not patentable under 35 USC 102 because the VW Bug, which has both four wheels and an engine in the rear, was known and used in this country more than

one year prior to today's date in this hypothetical example.

If we assume that the VW Bug and a 1974 Cadillac having a front supported engine and rear wheel drive comprise all of the prior art, then insofar as a rejection of claim 3 is concerned, 35 USC 102 does not apply, but 35 USC 103 may apply.

To determine the patentability of claim 3 one must answer the question: Given a front engine car with rear wheel drive and a rear engine car with rear wheel drive, would it have been obvious to provide a rear engine car with front wheel drive?

The answer to this question is not always clear. One must consider the skill of a person having ordinary competence in the car building industry. What factors would cause one of ordinary skill to make this combination, and what new and unobvious benefits are to be derived from this unique combination of features?

Claim 3 if granted would give the inventor the right to exclude others from making or using rear engine cars with front wheel drive, and rear engine cars with four wheel drive.

The applicant, as a general rule, does not wish to burden his claims with frivolous or unnecessary limitations. Claim 3 is valuable only if someone wants to make a rear engine car with front wheel drive and is willing to pay the patent holder money for the privilege of making such a car.

One would not, for example, wish to put in his claim the limitation that the wheels are made of chrome plated steel, because car manufacturers would be able to make the

inventor's car with painted steel wheels without infringing the claim, and the chances are they would do just that to avoid paying the patent holder royalties.

People not familiar with claim writing should look at the claims of patents which were cited by the examiner and try to get some feel for writing single sentence claims.

In writing a claim always think in generic terminology. For example, use terms like "fastening means" not "nail or screw" whenever possible. If an inventor's claim calls for a screw holding two parts together, a competing manufacturer can make the claimed device using a nail to hold the parts together without infringing the claim and without paying the inventor or patent owner royalties. Also, since the claim must define something different and unobvious over the prior art, claiming something like a specific fastening means will usually not help overcome an obviousness rejection because it is obvious to substitute a screw for a nail.

* * * * *

HOW TO RESPOND TO THIS ACTION

What to Include in the Response

In response to this Action, Applicant may make amendments or corrections to the text of the specification, claims, or drawings to overcome any rejections or deficiencies explained herein. However, in correcting the application the Applicant should take care not to enter "new matter" into the application. This means that features, method steps, or other parts of the invention not disclosed by the Applicant in the specification and claims as originally presented can not be added at this time, but the Applicant may rewrite portions of the presented material to bring his application into compliance with the Code of Federal Regulations.

Although Applicant may telephone the Examiner for questions or advice, the official reply to this action must be in writing. If Applicant feels that there are errors in the objections and rejections in this action, he must distinctly and specifically point out the supposed errors and must respond to every ground of objection and rejection. The Applicant must point out the patentable novelty which he thinks the claims present in view of the references cited or objections made. If amendments are made, he must show how the amendments avoid such references or objections.

Amendments to the *specification* text are made by specifying which paragraphs are being amended (for example by page and line numbers), and reproducing the entire text of these paragraph(s) which are being changed. We need both

A) a clean copy with the changes incorporated therein, and
B) a copy of the original paragraph with markings to show what changes have been made, for example by placing brackets [] around words deleted and underlining words added. You must send these entire paragraphs even if only one word therein has been changed. However, if a great many changes to many paragraphs are required, Applicant should rewrite the entire specification.

When sending a new clean specification, it is also necessary to:

A. Include a copy of the *old* specification with markings to indicate the deletions, insertions, and corrections that have been made (use underlining to indicate words that have been added and brackets to indicate words that have been deleted);

B. Include a statement that the new specification includes no new matter that was not disclosed in the original specification. This statement must be accompanied by the following language:

"I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon."

Amendments to the *claims* are made by reproducing the entire text of the claim(s) which are being changed. We need both A) a clean copy with the changes incorporated therein, and B) a copy of the original claim with markings to show what changes have been made, for example by placing brackets

[] around words deleted and underlining words added. You must send these entire claims even if only one word therein has been changed.

However, if changes to a claim(s) are extensive, it should be canceled and rewritten as a completely new claim(s). The numbering of the new claims should begin with the number next following the highest numbered claim existing in the application. When claims are canceled, remaining claims should not be renumbered. Also remember that the application filing fee covers up to 20 claims, up to 3 of which may be *independent*. If at any point in the prosecution the number of active (non-canceled) claims exceeds 20 total / 3 independent, it is necessary to send an additional fee for the additional claims (see enclosed fee list). If claims are later canceled to reduce the number of claims, Applicant will not be entitled to a refund.

Amendments to the *drawings* may be made by presenting copies of the current drawings with red markings to indicate proposed changes, or by presenting completely new drawings. But don't send originals of professionally prepared drawings because once drawings are sent, they cannot be returned. It is permissible to send copies of professional drawings.

A paper presenting amendments and/or remarks must bear an original signature by the Applicant or a legal representative.

When & Where to Respond

The address for response is:

Patent & Trademark Office
Washington, DC 20231

(No street address is needed)

A response to this action must be received within three months from the action mailing date, as noted on the cover page. However, this period may be extended to up to six months by filing a request with the appropriate fee under 37 CFR Section 1.136(a). Note the extension fees in the enclosed fee schedule. If no response has been received after 6 months, the application will be considered abandoned and will be removed from our files.

We don't consider the postmark date; the date that the Applicant's response is actually received in the Patent Office mail room will be deemed the date of response, unless Applicant sends the response by U.S. Mail and includes a "Certificate of Mailing" statement in the papers. A Certificate of Mailing allows Applicant to mail the response right up to midnight of the last day for response, and it will still be accepted, even though it will arrive after the period for response. Even if Applicant is mailing the response well before the due date, it is still recommended to use a Certificate of Mailing in case the response is unexpectedly delayed by the Post Office. The Certificate of Mailing consists of the following statement:

"I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on ..."

Name of applicant, assignee, or Registered Representative _____

Signature _____

Date _____

Fax Response

The Office is able to accept some types of papers by Fax, including amendments and remarks in response to an Office letter. The Fax number is given in the Office letter. Be sure to keep the original copies with original signatures on file for as long as the patent is valid. If a fee is due, you may pay the fee by a major credit card (American Express, Discover, Master Card, Visa) using form PTO-2038. Formal drawings cannot be accepted by Fax.

Once Applicant's response has been received, it will typically take 3 or 4 months before the Examiner again reviews the application and notifies Applicant of the results. However, as assurance that the response has been received, Applicant may include a self addressed stamped post card in the envelope, with the serial number of the application and a list of the things submitted written on the back (such as "Amendments to claims 1 & 3" and "Two new sheets of drawings"). The card will be stamped with the date received and returned immediately upon receipt. It is also acceptable to send the response certified, registered, or Express mail.

In order to match the response with the file, it should clearly indicate on the front page the inventor's name, application serial number, Art Unit number, date application was filed, title of invention, and a brief statement of the purpose of the paper or what it is in response to.

Telephone Assistance

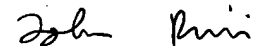
The phone number of the specific Examiner handling this application is given at the end of this letter. You may phone the Examiner for information regarding the status of the application, as well as to ask questions or make comments concerning the technical merits of the application.

The Patent Office also maintains an automated help line, 800-786-9199. You may use this line to hear recorded information on topics relating to patents and trademarks, and order publications and forms.

Internet Access

Visit the USPTO home page at <http://www.uspto.gov>

* * * * *



John A. Ricci
Primary Examiner

UNITED STATES PATENT AND TRADEMARK OFFICE

Effective October 1, 2000

The United States Patent and Trademark Office (USPTO) has adjusted certain patent fee amounts to reflect fluctuations in the Consumer Price Index (CPI). Any fee amount paid on or after October 1, 2000, must be paid in the revised amount.

The fees subject to reduction for small entities that have established status (37 CFR 1.27) are shown in a separate column.

For additional information, please contact the General Information Services Division at (703) 308-4357 or (800) 786-9199.

Fee Code	37 CFR	Description	Fee	Small Entity Fee (if applicable)
Patent Filing Fees				
101/201	1.16(a)	Basic filing fee - Utility	710.00	355.00
131/231	1.16(a)	Basic filing fee - Utility (CPA).....	710.00	355.00
102/202	1.16(b)	Independent claims in excess of three	80.00	40.00
103/203	1.16(c)	Claims in excess of twenty	18.00	9.00
104/204	1.16(d)	Multiple dependent claim	270.00	135.00
105/205	1.16(e)	Surcharge - Late filing fee or oath or declaration	130.00	65.00
106/206	1.16(f)	Design filing fee	320.00	160.00
132/232	1.16(f)	Design filing fee (CPA).....	320.00	160.00
107/207	1.16(g)	Plant filing fee	490.00	245.00
133/233	1.16(g)	Plant filing fee (CPA).....	490.00	245.00
108/208	1.16(h)	Reissue filing fee	710.00	355.00
134/234	1.16(h)	Reissue filing fee (CPA).....	710.00	355.00
109/209	1.16(i)	Reissue independent claims over original patent	80.00	40.00
110/210	1.16(j)	Reissue claims in excess of 20 and over original patent	18.00	9.00
114/214	1.16(k)	Provisional application filing fee	150.00	75.00
127/227	1.16(l)	Surcharge - Late provisional filing fee or cover sheet	50.00	25.00
139	1.17(k)	Non-English specification	130.00	
Patent Issue Fees				
142/242	1.18(a)	Utility issue fee	1,240.00	620.00
143/243	1.18(b)	Design issue fee	440.00	220.00
144/244	1.18(c)	Plant issue fee	600.00	300.00
Patent Maintenance Fees				
183/283	1.20(e)	Due at 3.5 years	850.00	425.00
184/284	1.20(f)	Due at 7.5 years	1,950.00	975.00
185/285	1.20(g)	Due at 11.5 years	2,990.00	1,495.00
	1.20(h)	Surcharge - Late payment within 6 months	130.00	65.00
187	1.20(i)(1)	Surcharge after expiration - Late payment is unavoidable	700.00	
188	1.20(i)(2)	Surcharge after expiration - Late payment is unintentional	1,640.00	
Miscellaneous Patent Fees				
179/279	1.17(e)	Request for continued examination (RCE) (see 37 CFR 1.114)	710.00	355.00
112	1.17(n)	Request for publication of SIR - Prior to examiner's action	920.00*	
113	1.17(o)	Request for publication of SIR - After examiner's action	1,840.00*	
146/246	1.17(r)	For filing a submission after final rejection (see 37 CFR 1.129(a))	710.00	355.00
149/249	1.17(s)	For each additional invention to be examined (see 37 CFR 1.129(b))	710.00	355.00
145	1.20(a)	Certificate of correction	100.00	
147	1.20(c)	For filing a request for reexamination	2,520.00	
148/248	1.20(d)	Statutory disclaimer	110.00	55.00

* Reduced by basic filing fee paid.

PAYMENTS FROM FOREIGN COUNTRIES MUST BE PAYABLE AND IMMEDIATELY NEGOTIABLE IN THE

Fee Code	37 CFR	Description	Fee	Small Entity Fee (if applicable)
<u>Patent Extension Fees</u>				
115/215	1.17(a)(1)	Extension for response within first month	110.00	55.00
116/216	1.17(a)(2)	Extension for response within second month	390.00	195.00
117/217	1.17(a)(3)	Extension for response within third month	890.00	445.00
118/218	1.17(a)(4)	Extension for response within fourth month	1,390.00	695.00
128/228	1.17(a)(5)	Extension for response within fifth month	1,890.00	945.00
<u>Patent Appeals/Interference Fees</u>				
119/219	1.17(b)	Notice of appeal	310.00	155.00
120/220	1.17(c)	Filing a brief in support of an appeal	310.00	155.00
121/221	1.17(d)	Request for oral hearing	270.00	135.00
<u>Patent Petition Fees</u>				
122	1.17(h) or (i)	Petitions to the Commissioner, unless otherwise specified	130.00	
126	1.17(p)	Submission of an Information Disclosure Statement (§ 1.97(c))	240.00	
138	1.17(j)	Petition to institute a public use proceeding	1,510.00	
140/240	1.17(l)	Petition to revive unavoidably abandoned application	110.00	55.00
141/241	1.17(m)	Petition to revive unintentionally abandoned application	1,240.00	620.00
123	1.17(q)	Petitions related to provisional applications	50.00	
111	1.20(j)(1)	Extension of term of patent	1,120.00	
124	1.20(j)(2)	Initial application for interim extension (see 37 CFR 1.790)	420.00	
125	1.20(j)(3)	Subsequent application for interim extension (see 37 CFR 1.790)	220.00	
<u>PCT Fees - National Stage</u>				
154/254	1.492(e)	Oath or declaration after twenty or thirty months from priority date	130.00	65.00
156	1.492(f)	English translation after twenty or thirty months from priority date	130.00	
956/957	1.492(a)(1)	IPEA - U.S.	690.00	345.00
958/959	1.492(a)(2)	ISA - U.S.	710.00	355.00
960/961	1.492(a)(3)	USPTO not ISA or IPEA	1,000.00	500.00
962/963	1.492(a)(4)	Claims meet PCT Article 33(1)-(4) - IPEA - U.S.	100.00	50.00
964/965	1.492(b)	Claims - extra independent (over three)	80.00	40.00
966/967	1.492(c)	Claims - extra total (over twenty)	18.00	9.00
968/969	1.492(d)	Claims - multiple dependent	270.00	135.00
970/971	1.492(a)(5)	For filing with EPO or JPO search report	860.00	430.00
<u>PCT Fees - International Stage</u>				
150	1.445(a)(1)	Transmittal fee	240.00	
151	1.445(a)(2)	PCT search fee - no U.S. application	700.00	
152	1.445(a)(3)	Supplemental search per additional invention	210.00	
153	1.445(a)(2)	PCT search - prior U.S. application	450.00	
190	1.482(a)(1)	Preliminary examination fee - ISA was the U.S.	490.00	
191	1.482(a)(1)	Preliminary examination fee - ISA not the U.S.	750.00	
192	1.482(a)(2)	Additional invention - ISA was the U.S.	140.00	
193	1.482(a)(2)	Additional invention - ISA not the U.S.	270.00	
<u>PCT Fees to WIPO</u>				
800		Basic fee (first thirty pages)	427.00*	
801		Basic supplemental fee (for each page over thirty)	10.00*	
803		Handling fee	153.00*	
899		Designation fee per country	92.00*	
<u>PCT Fee to EPO</u>				
802		International search	925.00*	

* WIPO and EPO fees subject to periodic change due to fluctuations in exchange rate. Refer to the *Official Gazette of the United States Patent and Trademark Office* for current amounts.

PAYMENTS FROM FOREIGN COUNTRIES MUST BE PAYABLE AND IMMEDIATELY NEGOTIABLE IN THE

Fee Code	37 CFR	Description	Fee
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Patent Service Fees

561	1.19(a)(1)(i)	Printed copy of patent w/o color, regular service, delivery by USPS, USPTO Box, or electronic means	3.00
562	1.19(a)(1)(ii)	Printed copy of patent w/o color, next business day delivery to USPTO Box	6.00
564	1.19(a)(2)	Printed copy of plant patent, in color	15.00
565	1.19(a)(3)	Copy of utility patent or SIR, with color drawings	25.00
566	1.19(b)(1)(i)	Certified copy of patent application as filed, regular service	15.00
567	1.19(b)(1)(ii)	Certified copy of patent application, expedited local service	30.00
568	1.19(b)(2)	Certified or uncertified copy of patent-related file wrapper and contents	150.00
569	1.19(b)(3)	Certified or uncertified copy of document, unless otherwise provided	25.00
570	1.19(b)(4)	For assignment records, abstract of title and certification, per patent	25.00
571	1.19(c)	Library service	50.00
572	1.19(d)	List of U.S. patents and SIRs in subclass	3.00
573	1.19(e)	Uncertified statement re status of maintenance fee payments	10.00
574	1.19(f)	Copy of non-U.S. document	25.00
575	1.19(g)	Comparing and certifying copies, per document, per copy	25.00
576	1.19(h)	Additional filing receipt, duplicate or corrected due to applicant error	25.00
577	1.21(c)	Disclosure document filing fee	10.00
578	1.21(d)	Local delivery box rental, annually	50.00
579	1.21(e)	International type search report	40.00
580	1.21(g)	Self-service copy charge, per page	0.25
581	1.21(h)	Recording each patent assignment, agreement or other paper, per property	40.00
583	1.21(i)	Publication in <i>Official Gazette</i>	25.00
584	1.21(j)	Labor charges for services, per hour or fraction thereof	40.00
585	1.21(k)	Unspecified other services, excluding labor	AT COST
586	1.21(l)	Retaining abandoned application	130.00
587	1.21(n)	Handling fee for incomplete or improper application	130.00
588	1.21(o)	APS-Text terminal session time, per hour	40.00
592	1.21(k)	APS-CSIR terminal session time, per hour	50.00
590	1.24	Patent coupons	3.00
589	1.296	Handling fee for withdrawal of SIR	130.00

Patent Enrollment Fees

609	1.21(a)(1)(i)	Application fee (non-refundable)	40.00
619	1.21(a)(1)(ii)	Registration examination fee	310.00
610	1.21(a)(2)	Registration to practice	100.00
611	1.21(a)(3)	Reinstatement to practice	40.00
612	1.21(a)(4)	Copy of certificate of good standing	10.00
613	1.21(a)(4)	Certificate of good standing - suitable for framing	20.00
615	1.21(a)(5)	Review of decision of Director, Office of Enrollment and Discipline	130.00
616	1.21(a)(6)(i)	Regrading of seven or fewer questions	230.00
620	1.21(a)(6)(ii)	Regrading of eight or more questions	460.00

GENERAL FEES

Finance Service Fees

607	1.21(b)(1)	Establish deposit account	10.00
608	1.21(b)(2)	Service charge for below minimum balance	25.00
608	1.21(b)(3)	Service charge for below minimum balance restricted subscription deposit account	25.00
617	1.21(m)	Processing each payment refused or charged back	50.00

Computer Service Fees

618	Computer records	AT COST
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